Appl. No.

: 10/616,059

Filed

July 9, 2003

AMENDMENTS TO THE CLAIMS

1. (Currently amended) A method for producing a microarray which comprises a substrate and at least one spot of a sample on a surface of the substrate comprising:

applying droplets of a liquid sample containing a biological substance to a plurality of positions on a surface of a water repellent substrate by using a microarrayer of the ink-jet type having a jet tip, the microarrayer exerting a pressure on the liquid sample contained therein to eject a droplet amount of the liquid sample from the jet tip, to form a plurality of droplets which form a spot on the surface of the substrate,

wherein a-the plurality of the droplets are applied to positions whereat predetermined positions apart from each other and wherein all the droplets join with one another to form the spot.

- 2. (Original) The method for producing a microarray according to claim 1, wherein the droplet is applied to a position where the droplet joins with a droplet or a drop consisting of a plurality of droplets that have already been applied to the surface of the substrate.
- 3. (Original) The method for producing a microarray according to claim 1, wherein the method further comprises:

imaging a square on the surface of the substrate, the square is filled with a plurality of circles, and

applying the droplets to respective positions of the circles.

4. (Original) The method for producing a microarray according to claim 2, wherein the method further comprises:

imaging a square on the surface of the substrate, the square is filled with a plurality of circles, and

applying the droplets to respective positions of the circles.

Appl. No. : 10/616,059 Filed : July 9, 2003

5. (Previously presented) The method for producing a microarray according to claim 1, wherein 2 to 100 of the droplets are applied so that the droplets join with one another.

- 6. (Previously presented) The method for producing a microarray according to claim 5, wherein 4 to 16 of the droplets are applied so that the droplets join with one another.
- 7. (Previously presented) The method for producing a microarray according to claim 2, wherein 2 to 100 of the droplets are applied so that the droplets join with one another.
- 8. (Previously presented) The method for producing a microarray according to claim 3, wherein 2 to 100 of the droplets are applied so that the droplets join with one another.
- 9. (Previously presented) The method for producing a microarray according to claim 4, wherein 2 to 100 of the droplets are applied so that the droplets join with one another.
- 10. (Previously presented) The method for producing a microarray according to claims 7, wherein 4 to 16 of the droplets are applied so that the droplets join with one another.
- 11. (Previously presented) The method for producing a microarray according to claims 8, wherein 4 to 16 of the droplets are applied so that the droplets join with one another.
- 12. (Previously presented) The method for producing a microarray according to claims 9, wherein 4 to 16 of the droplets are applied so that the droplets join with one another.
- 13. (New) The method of claim 1, wherein the positions between the droplets is equal to the sum of the respective radii of the droplets.